MAKING MODERN LIVING POSSIBLE

User Guide

ECtemp 550

Electronic Intelligent Thermostat

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1 Introduction

ECtemp 550 is an adaptive temperature controller specially designed for floor heating systems by using the built-in room sensor and an external floor sensor . It can, however, also be used for other heating systems (e.g. power heating units).

The thermostat will measure the radiant temperature from the floor combined with the air temperature in the room to compensate for the outside weather condition. This means that ECtemp 550 will automatically adjust the heating to meet your comfort levels regardless of changing weather conditions shortly after the settings are set and the desired comfort temperature has been selected. A sudden temperature drop in the room will also be detected. Instead of immediately switching on the heating to compensate, information is stored and a check will be made to detect whether this sudden drop of temperature may be caused by, for instance, a window that has been opened for 10 minutes.

Even the programming of economy temperatures (i.e. lowering of temperature at night and when you are at work) is very simple. A calculation of the heating start is not needed to reach a specific temperature at a specific time. Just tell the ECtemp 550 when you want the comfort temperature, and the rest will happen automatically; by identifying the rate of heat loss from the room, ECtemp 550 knows when to start heating in order to achieve the selected temperature at the right time.

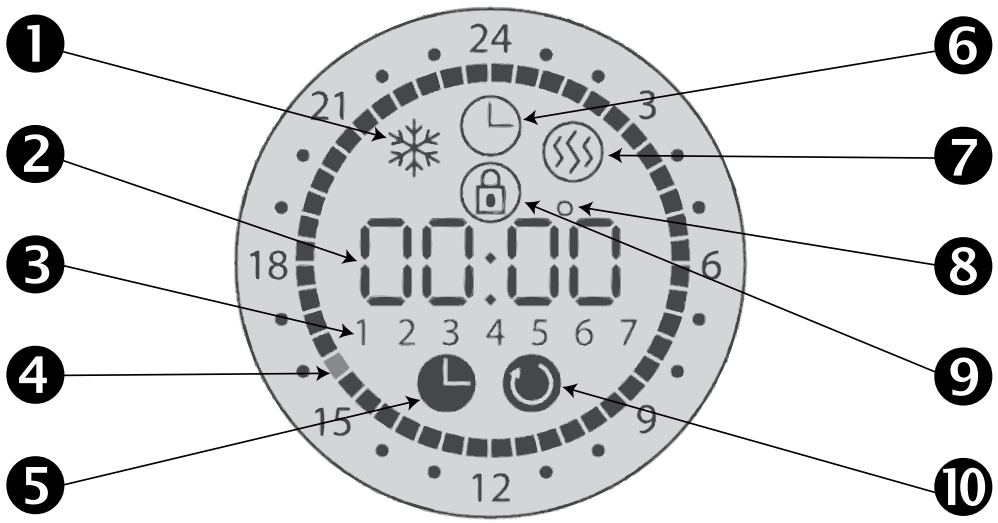
1.1 Safety Instructions

Please observe the following guidelines:

- Do not cover the thermostat, e.g. by hanging towels or similar items in front of it! This will impair the ability of the thermostat to sense and adjust the room temperature correctly.
- Do not spill liquids of any kind into the thermostat.
- Do not open, disassemble, or tamper with the thermostat in any way.
- If the thermostat is installed in a place frequented by small children, use the safety lock.
- Do not interrupt the power supply to the thermostat.
- The installation of the thermostat must be done by an authorized and qualified installer according to local regulations.

2 Settings

Using clear visual symbols, the display of the thermostat shows active and selected functions, the actual temperature and the time:



1. Symbol for frost protection.
2. Numeric display of time, temperature, text, etc.
3. Day of week.
4. Flashing indication of actual time.
5. Symbol for setting of time and day.
6. Symbol for timer mode.
7. Symbol indicating that the floor is being heated.
8. Symbol for degrees.

9. Safety lock.
10. Economy periods (i.e. periods with lowering of temperature).

Basic rules for changing thermostat settings	
Accessing different settings	When you press and hold the button for a certain number of seconds, different layers of settings will appear.
To increase a value	Turn the button to the right (clockwise).
To decrease a value	Turn the button to the left (counterclockwise).
To confirm a value or go to the next setting	Press the button once.
The unit of measurement for temperature	The temperature is either shown in celsius degrees (5°C to 35°C) if a room sensor is used, or as a scale from 1 to 10 (where each step corresponds to approximately 5°C) if only a floor sensor is used .

Network installation

If more ECtemp 550 thermostats have been installed, they may be connected in a network. If so, one of the thermostats is defined as the master unit controlling the time, day of week and lowering of temperature during economy periods for the other so-called slave units. This means that changes to these settings must be made on the master thermostat and will then automatically take effect on all "slave" thermostats.

Please contact the electrician to find out if the thermostats in your house are linked in a network and, if so, ask which thermostat is configured as master unit.

2.1 Frost Protection

How to set the thermostat in frost protection mode

1. Turn the button counter-clockwise until the temperature reaches +5°C (or 1 if a scale from 1 to 10 is used).

   A frost symbol ❄ will now appear on the display.

2.2 Time and Day of Week

The time and day of week is not set by default.

How to set the time and day of week

1. Press and hold the button for 3 seconds.
   The symbol for setting of time, the time and the number of the day in the week will be shown on the display

2. Turn the button to the right or left.

   Every time the time passes 00:00, the day of week number will go 1 day up/down depending on which way you turn the button.

   The number you choose will be the day of the current day of the week, i.e. the numbers 1-7 do not correspond to any specific day. For example, if today is Tuesday and you select 2 on the display, Tuesday will correspond to number 2.

3. Set the time correctly by turning the button.

4. When the right time is found, press the button once to save the settings.

2.3 Periods with Lowering of Temperature

With ECtemp 550 you have the possibility of either setting the thermostat to keep a constant temperature, or let the thermostat automatically switch between periods with a lower temperature (also called economy temperature) and periods with comfort temperature.
By default, the thermostat is set to the following comfort periods:

- Monday - Friday: 6:00 - 8:00 and 16:00 - 22:30.
- Saturday - Sunday: 6:00 - 22:30.

In order to automatically switch between comfort temperature and economy temperature (e.g. when going to bed or to work), the timer function is used.

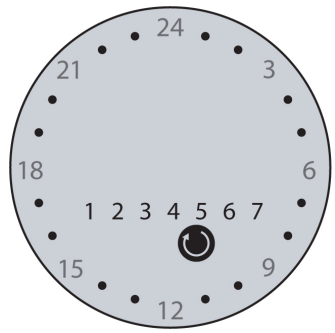
The temperature will be lowered by a certain number of degrees compared to the comfort temperature. By default this number is preset to -5°C.

If the adaptive function is active (this is normally the case), you only need to select the time at which you require comfort and economy temperatures. The thermostat will then calculate when the heating should start in order to reach the desired temperature at the specified time.

How to define comfort periods and economy periods

Note: The markings on the clock ring indicate periods with comfort temperature and periods with economy temperature. The flashing point indicates the actual time of day. If at any point you make a mistake, rotate the dial counter-clockwise to the first segment and press the button to clear the marking.

1. Press and hold the button for **6** seconds.
   The symbol for timer setting and day of week numbers are shown.



2. Turn the button clockwise until you reach the day of week and start time of the first comfort temperature period, e.g. day 1 at 06:00. Then press the button once to confirm the start time.

3. Turn the button clockwise until you reach the time at which the temperature should be lowered again, e.g. 07:30. Then press the button once to confirm.

4. Turn the button clockwise until you reach the time at which the comfort temperature is required again, e.g. 15:30. Then press the button once to confirm.

5. Turn the button clockwise until you reach time at which the temperature should be lowered again, e.g. 22:30. Then press the button once to confirm.

6. Turn the button clockwise. When you pass the midnight hour (00:00), the settings for the following day of the week can be made using the same procedure.

7. Repeat Steps 3-6 until period settings for all seven days of the week are made.

8. Hold the button for 3 seconds to save your settings and finish.
   The display will automatically return to normal display.

How to turn the timer function on and off

1. Press the button once to turn the timer function on or off.
   You may for instance want to turn the timer function off if a short extension of the comfort period is needed. You may also want to turn off the timer when a lowering of the temperature is required for a longer period, e.g. because of vacation.

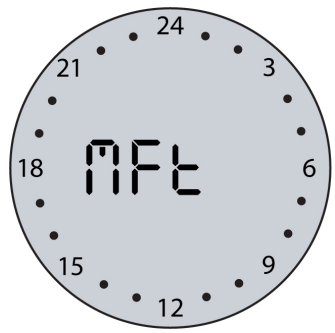
   When switched on, a timer symbol is shown in the upper part of the display.

   An unbroken clock ring indicates that constant comfort temperature is maintained, i.e. the timer function is deactivated.

2.4 Minimum Floor Temperature

Note: Minimum floor temperature only applies if the thermostat is configured to use a room and floor sensor (rFS mode) and only during comfort periods.

1. Press and hold the button for 9 seconds.
   "**MFt**" (Minimum Floor Temperature) appears on the display.



2. Turn the button until you reach the desired minimum floor temperature. Then press the button shortly to confirm.

   The display returns to normal.
   The floor temperature is now kept above the specified lower limit.

2.5 Safety Lock

The safety lock is used for preventing undesirable changes of the thermostat settings.

How to turn the safety lock on

1. Press and hold the button while turning it counter-clockwise until "**COdE**" appears on the display. Then turn the button clockwise to select "**0033**".

2. Press once to confirm and the safety lock symbol appears on the display. The safety lock is now on and the thermostat settings cannot be operated before the safety lock is switched off again.

How to turn the safety lock off

1. Press and hold the button while turning it counter-clockwise until "**COdE**" appears on the display.

2. Turn the button clockwise to select "**0033**".

3. Press once to confirm and the safety lock symbol disappears from the display.
   The safety lock is off and it is now possible to change the thermostat settings again.

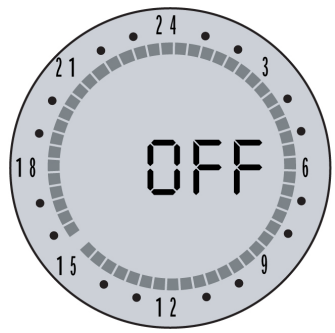
2.6 Turning the Thermostat On and Off

Note: The thermostat is on by default. Before you can switch the thermostat off, the timer function must be deactivated.

How to turn the thermostat off

1. Make sure the timer function is turned off (solid black outer ring).

2. Turn the button counter-clockwise until the temperature is below +5°C (or 1 if the temperature is shown as a scale from 1 to 10) and keep turning until **OFF** appears on the display.



How to turn the thermostat on

1. Turn the button clockwise until the temperature is above +5°C (or 1 if the temperature is shown as a scale from 1 to 10).

3 Saving Clock Settings (Backup Battery)

The backup battery saves time settings in case of power failure and recharges automatically when the mains supply is on again.

The thermostat must be connected to continuous power supply. **Do not interrupt the power supply to the thermostat.**

4 Error Messages

ECtemp 550 has a built-in system that constantly checks the heating system, the thermostat itself and a possible network for any malfunctions.

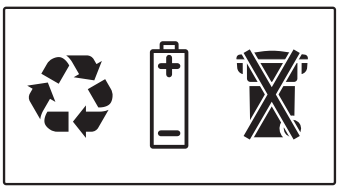
When an error occurs, the outer ring on the thermostat display flashes and one of the numbers normally indicating the day of week shows the error code.

No	Error	What to do?
2	Configured as Master, but another Master unit detected.	Call an electrician (Only one unit may be configured as a Master).
3	Configured as a Slave, but cannot find any Master unit.	Call an electrician (One unit must be configured as Master).

4	The thermostat is switched off because of overheating.	Call an electrician (Let the thermostat cool for a period. Then enter basic set-up to leave error mode).
5	Sensor fault. Floor sensor is short circuit.	Call an electrician (Floor sensor must be checked and replaced if necessary).
6	Sensor fault. Floor sensor open circuit.	Call an electrician (Floor sensor must be checked and replaced if necessary).
7	Clock is not set.	Set the clock.

5 Warranty

6 Disposal Instruction



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